



PROFILES IN soil health

Jeanne Elbert
Pocahontas, Iowa
Crops: Corn and soybeans
Planting: No-till
Covers: On all crop acres



Healthy Soil Is Central to Jeanne Elbert's Legacy

Ask most farmers why they're using over crops and you're likely to get a single-purpose answer like reduced soil erosion, reduced compaction, or improved nitrogen management.

But ask Jeanne Elbert that question, and she will give you a two-word answer that brings all those single benefits together: soil health. That's why she and her husband Troy have used cover crops on all their corn and soybeans for the past five years on their farmland south of Pocahontas in northwest Iowa.

"Our thinking is, farming is our livelihood. Because of this, our thinking revolves a lot around healthy soil," Jeanne explains. "That's why improving soil health was



It's a greener spring these days on Troy and Jeanne Elbert's land. Their cover crops mark their land in more ways than one.

our number one reason for cover crops and for other things we do," Jeanne says.

Their flat, productive land has been in Troy's family for more than 125 years, a history the couple hopes and plans to continue to write.

Good for the soil

Jeanne remembers the days she and Troy first considered cover crops about 10 years ago. “I remember Troy coming to me to share yet another one of his new ideas,” she recalls. “We were already using strip till and no-till, so we had all that crop residue on the ground that could be converted to organic matter,” says Jeanne. Both had grown up on farms where tilling the soil was the accepted practice.

“Troy was talking about feeding the microorganisms in the soil and breaking those corn stalks down into organic matter to build the soil,” Jeanne says. “When he explained all the benefits he thought would come from using cover crops, and asked me what I thought, I remember thinking we should do it because it would be good for the soil.”

I’m his sounding board

“We’re a team operation here, where our whole family contributes,” Jeanne says. “But, really, Troy is the brains behind everything. He loves to go online researching information, spending time talking and listening to people, asking a lot of questions, and isn’t afraid of digging into new ways of doing things,” Jeanne says. “Then he throws those ideas out to me—I’m his sounding board.”

While Jeanne says she trusts Troy’s judgment and supports his decisions, it’s obvious the whole family is a team. Jeanne home-schools their six children—a daughter who’s graduated from Iowa State University in agriculture, a son in his last year working towards his Ag/GPS major, and a daughter and three sons still at home—all six learning some of life’s lessons by getting involved in farm work.

“All our boys and girls take part in all areas of the farm operation when they’re old enough to handle it,” Jeanne says. “That includes driving the tractor to pull the fertilizer cart through the fields in the fall and to seed cover crops, so they know what cover crops are about,” Jeanne says.



Cereal rye top growth and roots protect flat soils against early spring winds and give food to soil microbes that build topsoil on the Elbert farm.

So does Jeanne. Since they don’t till the soil, she’s not in the field much in the spring of the year. But come fall, she’s a regular, running the combine or the grain cart at harvest. After harvest, she helps seed the cereal rye cover crop the Elberts use on all their cropland as well as on the land they rent.

Jeanne can’t help but notice their soil is improving—Troy makes sure of that. Troy would come to Jeanne in past years and want to show her and the kids the soil pits he had dug. “He would want to show us things others had explained and shown him in regards to improving the soil. It was evident as we could easily see earthworms and notice how corn roots would follow the earthworm channels and the

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channels left from decayed rye roots deep down into the soil,” Jeanne says.

“We can both see there’s more air in our soil now, thanks to the roots of those cover crops. That means we have better soil structure, with more pore spaces for better water infiltration and better drainage.”

Jeanne thinks those differences in the soil are also showing up as differences in the crops. “It hasn’t happened in a year, it’s something that takes time and some patience,” she says. “But now, it seems like our corn is greener and healthier, and I know we are using less nitrogen but getting higher yields, especially on our poorer soils—they seem to be the ones that respond to cover crops.”

“I believe healthier soils produce healthier plants,” Troy says. “Healthy plants fend off pathogens and insects, like we humans fend off diseases better when we’re healthy.”

Women getting more involved

“I think women are getting more involved in farming and caring for the land,” Jeanne says. “My friends are close working partners on their farms, too. As women, I think we have a natural tendency to take care of people and things, including the land.”

Not wanting to push their way of farming onto others, both Troy and Jeanne are hesitant to say too much about the changes they see in their crops and their soil. But they know their cover crops, no-till, split applications of nitrogen fertilizer, and other practices are building their soils and producing good crops at the same time they’re keeping nutrients on the farm rather than running off into water supplies.

It seems other people in the community have noticed, too. The Elberts were honored as 2014 Conservation Farmers of the Year in Pocahontas County by the Pocahontas County Soil and Water Conservation District. They were cited for their use of 12 different conservation and water quality practices, including cover crops, farmed wetlands, filter strips, no-till, and planting a farmstead windbreak.

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- Jeanne Elbert, landowner

“What impresses me is the Elberts think outside the box, but they’re respected by both farmers and the community,” says NRCS District Conservationist Larrette Kolbe. “Other farmers will ask me ‘How did the Elberts do it?’ They’ve been early pioneers in the soil health improvements in the community.”

The Elberts have many more reasons for using cover crops, but six are closest to their hearts—Hope (and husband Sam Radke); Blake: Brooke; Trent; Ryan; and Carson. “They have an interest in the farm and agriculture—there’s a good chance they will be farming or doing something in that area after us,” Troy says. “Any time we get a chance to improve the farm long-term, we need to do it.”

“We’re in this together, and we’ll keep moving forward together,” Jeanne says of their efforts to build their soils. “We love farming because it’s something we can do together as a family. It’s the experiences we have together on this farm as our children grow that will be a big part of the legacy we leave behind.”

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